

## AMENDMENTS TO THE CLAIMS

1-13. (Cancelled)

14. (Previously Presented) An array of oligonucleotide probes, for analysing a polynucleotide target containing a variable sequence, in which each component oligonucleotide (i) comprises a sequence complementary to the target including an expected variant of the target, (ii) has a free 3'-OH group and/or a free 5'-phosphate, and (iii) is tethered to a solid support in an orientation which (a) permits duplex formation with the target, and (b) permits ligation or chain extension only when the sequence of the oligonucleotide matches the variable sequence of the target.

15. (Previously Presented) The array of claim 14, wherein the probes are tethered by a covalent linkage.

16. (Previously Presented) The array of claim 14, wherein the probes are tethered through a 5' or 3' nucleotide.

17. (Previously Presented) The array of claim 14, wherein the probes are tethered at spaced locations on a derivatised glass surface or on the surface of a silicon microchip or on propylene.

18. (Previously Presented) The array of claim 14, wherein the probes are tethered to individual beads.

19. (Previously Presented) The array of claim 14, wherein the probes are synthesised *in situ*.



20. (Previously Presented) The array of claim 14, wherein the probes are pre-synthesised.

21. (Previously Presented) An array of oligonucleotide probes, for analysing a polynucleotide target containing a variable number tandem repeat sequence, in which each component oligonucleotide is tethered to a solid support and (i) comprises a sequence complementary to a part of the target immediately adjacent the repeat sequence, (ii) has a free 3'-OH group and/or a free 5'-phosphate, (iii) comprises a sequence complementary to the repeat sequence of the target and containing a number of repeats expected in the target, and (iv) is configured in a way that (a) permits duplex formation with the target, and (b) permits ligation or chain extension only when the number of repeats in the oligonucleotide equals or is less than the number of repeats in the target.

22. (Previously Presented) The array of claim 21, wherein each component oligonucleotide (iv) is configured in a way that (b) permits chain extension: by ligation only when the number of repeats in the oligonucleotide equals the number of repeats in the target; or by polymerisation only when the number of repeats in the oligonucleotide is less than the number of repeats in the target.

23. (Previously Presented) The array of claim 21, wherein the probes are tethered by a covalent linkage.

24. (Previously Presented) The array of claim 21, wherein the probes are tethered through a 5' or 3' nucleotide.

25. (Previously Presented) The array of claim 21, wherein the probes are tethered at spaced locations on a derivatised glass surface or on the surface of a silicon microchip or on propylene.



26. (Previously Presented) The array of claim 21, wherein the probes are tethered to individual beads.

27. (Previously Presented) The array of claim 21, wherein the probes are synthesised *in situ*.

28. (Previously Presented) The array of claim 21, wherein the probes are pre-synthesised.